

**REMARKS**

Applicant respectfully requests consideration of the subject application as amended herein. This Amendment is submitted in response to an Office Action mailed on March 19, 2003.

Applicant affirms the election of Group I (claims 1-23 and 25) as provisionally selected by Michael Bernardicou on February 27, 2003. Claims 24, 26, and 27 are directed to non-elected claims and are canceled without prejudice.

In the Office Action mailed on March 19, 2003, the Examiner rejected claims 1-18, 20, 22, and 23 and objected claims 19 and 25.

Applicant thanks the Examiner for allowing claims 19, 21, and 25. Applicant also thanks the Examiner for indicating that claims 20, 22, and 23 are allowable if rewritten to over the rejections under 35 U.S.C. § 112, second paragraph.

New claims 28-31 have been added. No new matter has been added.

**35 U.S.C. § 112, second paragraph rejection**

The Examiner rejected claims 2, 4, 6-8, 11, 13, 16, 20, 22 and 23 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims have been amended. Applicant respectfully requests the Examiner to withdraw this rejection.

**35 U.S.C. § 102(e) rejection**

Claims 1, 3-5, 7-10, 12-15, 17, and 18 are rejected under 35 U.S.C. § 102(e) as being anticipated by Jain, et al. (U.S. Patent No. 6,465,044, hereinafter "Jain").

Claims 1, 5, 9, and 14 have been canceled thus, Applicant is not expressing an opinion regarding these claims at this moment.

Applicant submits that claims 3-4, 7-8, 10, 12-13, 15, and 17-18 are patentable over Jain. Jain dealt with depositing an oxide film by thermal chemical vapor deposition (CVD) using an alkylsiloxane precursor that includes octamethyltrisiloxane (OMTS) and decamethyltetrasiloxane. The alkylsiloxane precursor is reacted with ozone in a thermal CVD system to deposit the oxide film. (See Jain, col. 4, lines 15-20). Applicant's claims 3-4, 7-8, 10, 12-13, 15, and 17-18 require a silicon source that is selected from the group consisting of silane, disilane, methylsilane, and halogenated silanes (e.g., dichlorosilane, and hexachloro disilane). These silicon sources are not the alkylsiloxane precursor used in Jain.

Thus, Jain does not anticipate claims 3-4, 7-8, 10, 12-13, 15, and 17-18. Applicant respectfully requests the Examiner to withdraw the rejection.

**35 U.S.C. § 102(b) rejection**

Claims 5-8, and 9-13 are rejected under 35 U.S.C. § 102(b) as being anticipated by Adams, (U.S. Patent No. 4,217,375, hereinafter "Adams"). As mentioned, claims 5 and 9 have been canceled thus, Applicant is not expressing an opinion regarding these claims at this moment.

Applicant respectfully submits that claim 6-8 and 10-13 are patentable over Adams. Adams dealt with a batch type (furnace) of processing. In a batch type of processing, multiple wafers are processed in the same chamber. On the other hand, as amended, claims 6-8 and 10-13 require a single-wafer deposition chamber, in only 1 wafer is processed at a time.

Additionally, claims 6-8 and 10-13 are patentable over Adams because Adams also cannot make obvious Applicant's invention as claimed in 6-8 and 10-13. The processing conditions discussed in Adam are for a batch type processing and it would not be obvious for one of ordinary skill in the art to apply these conditions to a process of a single-wafer deposition chamber. It is known that a batch type of processing condition cannot simply be applicable to a single-wafer deposition process.

Thus, Adams does not anticipate or make obvious claims 6-8 and 10-13. Applicant respectfully requests the Examiner to withdraw the rejection.

Additionally, claims 5-7 and 9-12 are rejected under 35 U.S.C. § 102(b) as being anticipated by Yoshioka, et al., (U.S. Patent No. 3,442,700, hereinafter "Yoshioka").

Applicant respectfully submits that claim 6-7 and 10-13 are patentable over Yoshioka. Yoshioka dealt with a depositing an oxide layer that involves producing silica films by the reaction of silicon tetrafluoride and steam in a "flowing system" method. (See col. 3, lines 3-6). Additionally, the ratio indicated in Yoshioka refers to 20:1000 of water vapor (steam) to silicon tetrafluoride. As can be seen, Yoshioka refers to a ratio between the water vapor and the silicon tetrafluoride. Also, Yoshioka required much more of the silicon tetrafluoride compared to the water vapor.

On the other hand, as indicated in claims 6-7 and 10-13 of Applicant's invention deals with a ratio between a silicon source gas and an oxidation source gas. The ratio used in Yoshioka is thus unrelated to the ratio used in Applicant's claims 6-7 and 10-13. Even if they are related, the ratio in Applicant's invention as claimed in claims 6-7 and 10-13 required 1:50 to 1:10000 of silicon to oxidation source gas. This ratio range requires much more of the amount of oxidation source gas compared to the amount of the silicon source gas.

Thus, Yoshioka does not anticipate claims 6-8 and 10-13. Applicant respectfully requests the Examiner to withdraw the rejection.

**35 U.S.C. § 103(a) rejection**

Claims 1-3, and 14-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshioka. Claims 1 and 14 have been canceled thus, Applicant is not expressing an opinion on these claims at this point.

As discussed above, the ratio used in Yoshioka is unrelated to the ratio used in Applicant's claims 6-7 and 10-13. Even if they are related, the ratio in Applicant's invention as claimed in claims 6-7 and 10-13 required 1:50 to 1:10000 of silicon to oxidation source gas which is opposite from what is required in Yoshioka (20:1000 of water vapor (steam) to silicon tetrafluoride).

Applicant's ratio range as claimed in claims 6-7 and 10-13 requires much more of the amount of oxidation source gas compared to the amount of the silicon source gas whereas Yoshioka required much more of the silicon tetrafluoride compared to the water vapor. These two ratio ranges are not only unrelated, they also require opposite amount of silicon source gas.

Thus, Yoshioka cannot make obvious claims 2-3 and 15-17 since the two ratios are unrelated and even if they are related, they are in opposite direction of each other. Applicant respectfully requests the Examiner to withdraw the rejection.

**Allowable Subject Matter**

Applicant thanks the Examiner for indicating that claims 20, 22, and 23 contain allowable subject matter if rewritten to overcome the rejections under 35 U.S.C 112

second paragraph, set forth in this Office action. Claims 20, 22, and 23 have been so amended. In view of these amendments, Applicant respectfully submits that claims 20, 22, and 23 are now in condition for allowance, and request allowance of said claims.

Applicant submits that the newly added claims 28-31 are allowable for they depend from an allowed claim, claim 25.

**Deposit Account Authorization**

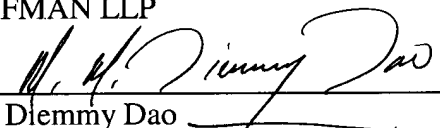
Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due. Furthermore, if an extension is required, then Applicant hereby requests such extension.

If the Examiner determines the prompt allowance of these claims could be facilitated by a telephone conference, the Examiner is invited to contact Mimi Diemmy Dao at (408) 720-8300.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR  
& ZAFMAN LLP

Dated: June 18, 2003

  
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